

IN THE CLAIMS:

The following is a complete listing of the claims, and replaces all earlier listings and all earlier versions.

1. (previously presented): An image processing method comprising the steps of:

obtaining a plurality of sets of colorimetric data which correspond to respective light sources;

inputting a viewing condition;

comparing the input viewing condition with conditions of the light sources to select a set of colorimetric data corresponding to a light source that has a condition similar to the input viewing condition, from the plurality of sets of colorimetric data; and

conjecturing colorimetric data depending on the input viewing condition from the selected set of colorimetric data.

2. (currently amended): The method according to claim 1, further comprising the step of caching the conjectured colorimetric data to ~~the~~ a profile which stores the plurality of sets of colorimetric data.

3. (original): The method according to claim 1, further comprising the step of generating conversion data for color matching based on the conjectured colorimetric data.

4. (previously presented): The method according to claim 1, wherein said comparing step includes selecting colorimetric data by comparing a chromaticity of a light source designated by the input viewing condition with chromaticities of the plurality of light sources to which the sets of colorimetric data correspond.

5. (previously presented): The method according to claim 1, wherein said comparing step includes selecting colorimetric data by comparing a color temperature of a light source designated by the input viewing condition with color temperatures of the plurality to which the sets of colorimetric data correspond.

6. (previously presented): The method according to claim 1, wherein said conjecturing step includes conjecturing colorimetric data corresponding to the input viewing condition by using a color appearance model.

7. (currently amended): The method according to claim 1, wherein the conjectured colorimetric data is cached to another profile different from a profile which stores the plurality of sets of colorimetric data in correspondence with the input viewing condition.

8. (previously presented): An image processing method comprising the steps of:

obtaining a plurality of sets of colorimetric data which correspond to respective light sources;

inputting a viewing condition;

comparing the input viewing condition with conditions of the light sources to select a set of colorimetric data corresponding to a light source that has a condition similar to the input viewing condition, from the plurality of sets of colorimetric data; and

generating data for color matching corresponding to the input viewing condition based on the selected set of colorimetric data.

9. (currently amended): The method according to claim 8, further comprising the step of caching the generated data to ~~the~~ a profile which stores the plurality of sets of colorimetric data.

10. (previously presented): The method according to claim 8, wherein said comparing step includes selecting colorimetric data by comparing a chromaticity of a light source designated by the input viewing condition with chromaticities of the plurality of light sources to which the sets of colorimetric data correspond.

11. (previously presented): The method according to claim 8, wherein said comparing step includes selecting colorimetric data by comparing a color temperature of a light source designated by the input viewing condition with color temperatures of the plurality of light sources to which the sets of colorimetric data correspond.

12. (previously presented): The method according to claim 8, wherein said generating step further comprises the steps of:

conjecturing a set of colorimetric data depending on the input viewing condition from the selected set of colorimetric data by using a color appearance model; and
generating the data for color matching corresponding to the input viewing condition from the conjectured set of colorimetric data.

13. (currently amended): The method according to claim 8, wherein the generated data is cached to another profile different from a profile which stores the plurality of sets of colorimetric data in correspondence with the input viewing condition.

14. (previously presented): An image processing apparatus comprising:
an obtaining section, arranged to obtain a plurality of sets of colorimetric data which correspond to respective light sources;

an inputting section, arranged to input a viewing condition;

a selector, arranged to select a set of colorimetric data corresponding to a light source, which has a condition similar to the input viewing condition, from the plurality of sets of colorimetric data in accordance with comparison between the input viewing condition and condition of the light sources; and

a conjecturing section, arranged to conjecture colorimetric data depending on the input viewing condition from the selected colorimetric data.

15. (currently amended): The apparatus according to claim 14, further comprising a cache arranged to cache the conjectured colorimetric data to ~~the~~ a profile which stores the plurality of sets of colorimetric data.

16. (previously presented): An image processing apparatus comprising:
an obtaining section, arranged to obtain a profile having a plurality of sets of colorimetric data which correspond to respective light sources;

an inputting section, arranged to input a viewing condition;

a selector, arranged to select a set of colorimetric data corresponding to a light source, which has a condition similar to the input viewing condition, from the plurality of sets of colorimetric data in accordance with comparison between the input viewing condition and conditions of the light sources; and

a generator, arranged to generate data for color matching corresponding to the input viewing condition based on the selected set of colorimetric data.

17. (currently amended): The apparatus according to claim 16, further comprising a caching section arranged to cache the generated data to ~~the~~ a profile which stores the plurality of sets of colorimetric data.

18. (previously presented): A computer program product storing a computer readable medium having computer program codes, for an image processing method, said product comprising process procedure codes for:

obtaining a plurality of sets of colorimetric data which correspond to respective light sources;

inputting a viewing condition;

comparing the input viewing condition with conditions of the light sources to select a set of colorimetric data corresponding to a light source that has a condition similar to the input viewing condition, from the plurality of sets of colorimetric data; and

conjecturing colorimetric data depending on the input viewing condition from the selected set of colorimetric data.

19. (currently amended): The product according to claim 18, further comprising caching process procedure code for caching the conjectured colorimetric data to the a profile which stores the plurality of sets of colorimetric data.

20. (previously presented): A computer program product storing a computer readable medium having computer program codes, for an image processing method performing color process on input image data based on a color appearance model, said product comprising process procedure codes for:

obtaining a profile having a plurality of sets of colorimetric data which correspond to respective light sources;

inputting a viewing condition;

comparing the input viewing condition with conditions of the light sources to select a set of colorimetric data corresponding to a light source that has a condition similar to the input viewing condition, from the plurality of sets of colorimetric data; and generating data for color matching corresponding to the input viewing condition based on the selected set of colorimetric data.

21. (currently amended): The product according to claim 20, further comprising caching process procedure code for caching the generated data to ~~the~~ a profile which stores the plurality of sets of colorimetric data.